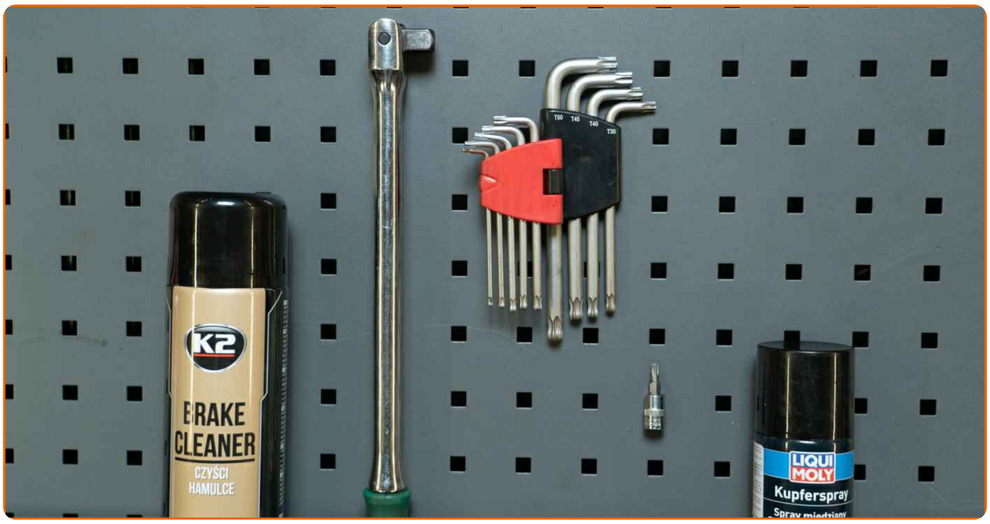
AUTODOC CLUB

How to change brake drum on a car – replacement tutorial

VIDEO TUTORIAL



REQUIRED TOOLS:



- Flat screwdriver
- Tap wrench
- Torx wrench
- Torx bit
- Ceramic grease
- Brake cleaner
- Jack

BUY TOOLS

Please note!

- A drum brake system is usually only installed on the rear axle
- The brake drum can either be installed on the wheel hub or be integrated with the wheel bearing
- Brake drums should always be replaced in pairs on an axle
- Along with these parts, it's also recommended to install new brake shoes and related components

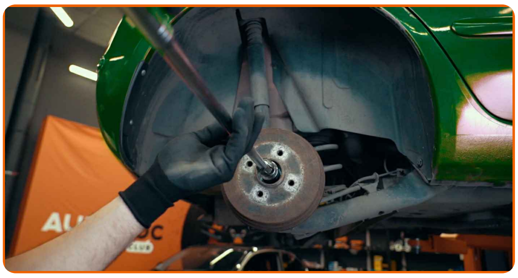
1 Use a car lift to replace the component or a jack with jack stands and wheel chocks



2 When working with one with a built-in bearing, first remove the cap covering the fastener



3 Then unscrew the fastener and remove the brake drum from the stub axle



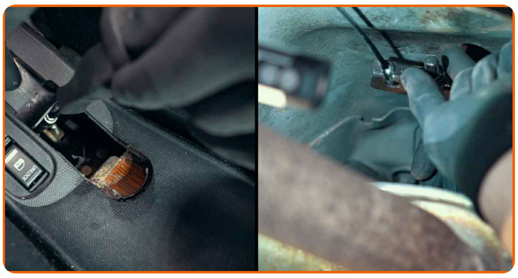
Important!

- The brake drum is held in place not only by the wheel bearing, but also by the brake shoes

4 Access the handbrake mechanism from inside the vehicle under the centre console or from under the car near the transmission tunnel



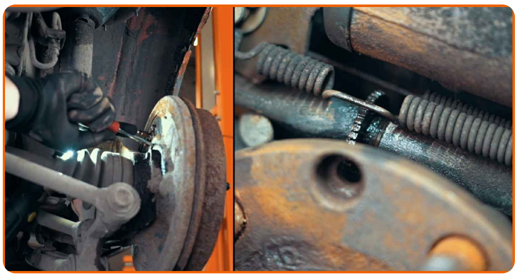
5 Loosen the handbrake cables using a suitable tool



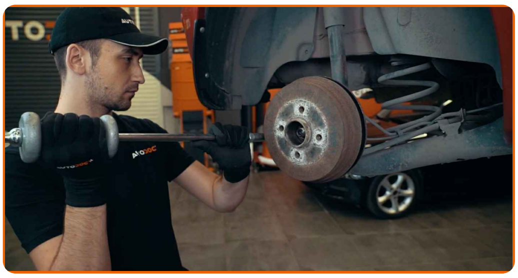
Please note!

- It is not always enough to loosen the cables to remove the brake drum
- A corroded or jammed brake adjuster can make the part difficult to remove
- The adjuster may also hold the brake shoes spread too much
- This prevents the removal of the brake drum

6 There may be an adjuster access hole in the brake drum backing plate opposite the adjuster gear. You can actuate the adjustment mechanism via that access hole to bring the brake shoes closer together. This makes the brake drum easier to remove



7 If the mechanism is corroded, use a slide hammer or special puller to remove the brake drum



Be careful!

- Incorrect removal of the brake drum can result in damage to the fasteners of the brake shoes
- In this case, you will need a repair kit

8 If the brake drum is stuck to the wheel hub, you can tap the drum with a hammer



Please note!

- Some cars have the drums with special service holes
- Screwing in bolts of a matching diameter into those holes will help remove the drum from the wheel hub
- The parts should be replaced on both sides of the axle

9 Be sure to inspect and clean all the fasteners

10 Remember the position of all the components and familiarise yourself with their design



11 First, disassemble the mechanism only on one side of the axle. If you have any difficulties reassembling the parts on one side, you can refer to the assembly on the other side



12 Replace the components and reassemble it in reverse order



AUTODOC experts recommend:

- Start disassembly with the springs that keep the brake shoes spread and prevent their removal
- Be careful as there is a risk of injury if the springs are handled carelessly
- Use special tool kits to remove them
- Please note that such kits have a limited range of functions and are designed for a particular car
- You can also use a fork-type screwdriver
- Thanks to the recess it has, this tool can be used to carefully remove the spring without the risk of it jumping off

13 When removing the components, be sure to remember their position



Be careful!

- If they are installed incorrectly, the mechanism can fail

14 Clean the working area



15 Treat all the surfaces and components with an anti-corrosion agent



16 Before the replacement, compare the removed brake shoes with the new ones so that you don’t install them on the wrong side. The brake shoes differ depending on the side of installation



17 Bear in mind that it may be necessary to remove some components from the old brake shoes and mount them on the new ones. For example, the parking brake lever



18 Reinstall the components in reverse order



Please note!

- Brake drums may have a magnetic or toothed ABS ring
- This allows the ABS sensor to read the wheel speed
- If the new brake drums have no ABS rings, you should remove them from the old parts and install on the new ones

19 Remove the magnetic rings carefully so as not to damage them If the parts get deformed, it will be impossible to obtain correct readings



20 Prepare suitable tools that will allow you to remove the ABS rings carefully



Important!

- The brake drum may be mounted on the wheel hub or, like in this case, have a built-in bearing
- If there is no bearing in the component, it should be purchased separately and fitted into the new drum
- Note that the old bearings cannot be fitted into new brake drums

21 The new bearings should be pressed into their mounting seats. It's recommended to do this using a hydraulic press. If this equipment is not available, the bearing can be pressed in using a driver and a hammer



22 Lubricate the mounting seat and install the bearing



23 Select a driver with the correct diameter and use it to apply force only to the outer bearing ring



24 Pushing the inner ring can damage the bearing



25 Position the driver and start hitting it with a hammer



AUTODOC recommends:

- Make sure that the bearing is fitting into the mounting seat without misalignment

26 Look at the back side of the drum from time to time to check how deep the bearing has been pressed in



27 Press in the bearing until it is fully installed



28 Fit in the retaining ring, which will help you determine if the bearing has been installed correctly



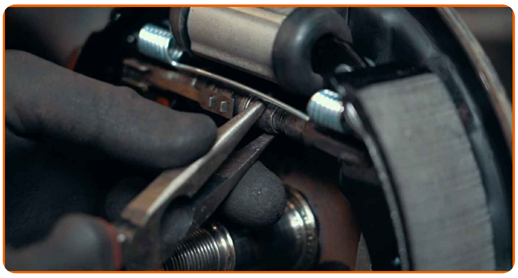
29 Install the ABS magnetic ring using a driver with a suitable diameter



30 Adjust the position of the brake shoes before installing the brake drum on the stub axle



31 Spread the break shoes slightly using the brake adjuster and mount the drum



32 Press the brake pedal and engage and release the handbrake a few times. This will ensure the correct positioning of the brake shoes



33 Carry out the same procedure on the second mechanism on the axle



Please note!

- Too much free rotation of the brake drum indicates that the shoes need to be spread a little bit more
- It’s best when you need to apply some effort when placing the brake drum on the brake shoes and it touches them slightly when rotating
- You can check the accuracy of the shoe adjustment by drawing some marks with a marker pen

34 Use new fasteners and tighten them to the manufacturer's recommended torque



35 Be sure to adjust the tension of the handbrake cables



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